

**Notice of Allowability**

Application No.

10/691,052

Examiner

John m. Cooney

Applicant(s)

MILLIREN, CHARLES M.

Art Unit

1711

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to papers received by 2-28-06.
2. ☒ The allowed claim(s) is/are 1-32 and 34-39.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some\* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),  
Paper No./Mail Date 0505
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_.
7. ☒ Examiner's Amendment/Comment
8. ☐ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_.

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An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Claims 1, 2, 10, 15, 16, 23, 32, 37, and 38 have been amended to read as follows:

Claim 1: A semi-rigid viscoelastic foam made from a Part A composition and a Part B composition, said Part A composition comprising 20-50 weight percent isocyanate (NCO), said Part B composition comprising 1-15 parts by weight propylene oxide-extended monoethanolamine-based polyether polyol, 6-25 parts by weight propylene oxide-extended triethanolamine-based polyether polyol, 22-40 parts by weight propylene oxide-extended ethylenediamine-based polyether polyol, at least 10 parts by weight of an additional polyol selected from the group consisting of filled polyether polyols and unfilled polyether polyols, and 0.4-4 parts by weight catalyst, said Part B composition having 100 parts by weight total polyols, said Part A and Part B compositions being combined to provide said semi-rigid viscoelastic foam.

Claim 2: A semi-rigid viscoelastic foam made from a Part A composition and a Part B composition, said Part A composition comprising 20-50 weight percent isocyanate (NCO), said Part B composition comprising 1-15 parts by weight propylene oxide-extended monoethanolamine-based polyether polyol, 6-25 parts by weight propylene oxide-extended triethanolamine-based polyether polyol, 22-40 parts by weight propylene oxide-extended ethylenediamine-based polyether polyol, at least 10 parts by weight of an additional, tri-functional polyether polyol, and 0.4-4 parts by weight catalyst, said Part B composition having 100 parts by weight total polyols, said Part A and Part B compositions being combined to provide said semi-rigid viscoelastic foam.

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Claim 10: A semi-rigid viscoelastic foam according to claim 1 or 2, said monoethanolamine based polyol being present in an amount of less than 10 parts by weight, said triethanol amine based polyol being present in an amount of greater than 10 parts by weight, and said ethylenediamine based polyol being present in an amount of 22-36 parts by weight.

Claim 15: A method of making a viscoelastic foam comprising the steps of:

- a) providing a Part A composition comprising 20-50 weight percent isocyanate;
- b) providing a Part B composition comprising 1-15 parts by weight propylene oxide-extended monoethanolamine-based polyether polyol, 6-25 parts by weight propylene oxide-extended triethanolamine-based polyether polyol, 22-40 parts by weight propylene oxide-extended ethylenediamine-based polyether polyol, at least 10 parts by weight of an additional polyol selected from the group consisting of filled polyether polyols and unfilled polyether polyols, and 0.4-4 parts by weight catalyst, said Part B composition having 100 parts by weight total polyols; and
- c) combining said Part A and Part B compositions to provide a semi-rigid viscoelastic foam having an index of 70-130.

Claim 16: A method of making a viscoelastic foam comprising the steps of:

- a) providing a Part A composition comprising 20-50 weight percent isocyanate;
- b) providing a Part B composition comprising 1-15 parts by weight propylene oxide-extended monoethanolamine-based polyether polyol, 6-25 parts by weight propylene oxide-extended triethanolamine-based polyether polyol, 22-40 parts by weight propylene oxide-extended ethylenediamine-based polyether polyol, at least 10 parts by weight of an additional, tri-functional polyether polyol, and 0.4-4 parts by weight catalyst, said Part B composition having 100 parts by weight total polyols; and
- c) combining said Part A and Part B compositions to provide a semi-rigid viscoelastic foam having an index of 70-130.

Claim 23: A method according to claim 15 or 16, said monoethanolamine based polyol being present in an amount of less than 10 parts by weight, said triethanol amine based polyol being present in an amount of greater than 10 parts by weight, and said ethylenediamine based polyol being present in an amount of 22-36 parts by weight.

Claim 32: A semi-rigid viscoelastic foam, said foam being made from a Part A composition and a Part B composition, said Part A composition comprising 20-50 weight percent isocyanate (NCO), said Part B composition comprising water, at least one catalyst and each of the following, all in parts by weight:

1-15 parts propylene oxide-extended monoethanolamine-based polyether polyol,

6-25 parts propylene oxide-extended triethanolamine-based polyether polyol,

22-40 parts propylene oxide-extended ethylenediamine-based polyether polyol,

0-50 parts filled polyol, and

0-50 parts unfilled polyol;

wherein said Part B composition includes at least one of said filled or unfilled polyols, said Part B composition having 100 parts by weight total polyols.

Claim 37: A semi-rigid viscoelastic foam according to claim 1, 2, or 32, said part B composition comprising 40-60 parts by weight total amine-based polyol.

Claim 38: A semi-rigid viscoelastic foam according to claim 37, said part B composition comprising 20-30 parts by weight unfilled polyol and 20-30 parts by weight filled polyol.

Amendment have been made to correct the following problems under 35 USC 112 and/or typographical errors:

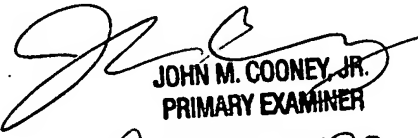
- Claims 1, 2, 15, 16 and 32 all have been amended to insert "polyether" where requested by the Examiner, to make explicit that all the polyol components are present in parts by weight, and to indicate the Part B composition has 100 pbw total polyols.
- Claims 10 and 23 have been amended to specify the ethylenediamine based polyol is present in an amount of 22-36 pbw in conformity with the respective independent claims.
- Claim 37 has been amended to avoid redundancy with the independent claims from which it depends.
- Claim 38 has been amended to correct a typographical error -- second occurrence of "unfilled" rewritten as "filled."

Authorization for this examiner's amendment was given in a telephone interview with Steven Solomon on 2-28-06.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Cooney whose telephone number is 571-272-1070. The examiner can normally be reached on M-F from 9 to 6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck, can be reached on 571-272-1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
JOHN M. COONEY JR.  
PRIMARY EXAMINER  
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